#### LEGGETTE, BRASHEARS & GRAHAM, INC.

### PROFESSIONAL GROUND-WATER AND ENVIRONMENTAL ENGINEERING SERVICES

6525 GRAND TETON PLAZA MADISON, WI 53719 608-833-5555 FAX 608-833-5551

April 4, 2002

Ms. Linda Hanefeld Wisconsin Department of Natural Resources 1500 N. Johns Street Dodgeville, WI 53533

RE: BRRTS No. 03-25-184263

Additional RI Workplan Kwik Trip No. 765 115 S. Iowa Street Dodgeville, Wisconsin

Dear Ms. Hanefeld:

On behalf of Kwik Trip, Inc. (Kwik Trip), Leggette, Brashears & Graham, Inc. (LBG) is submitting this Additional Remedial Investigation (RI) Workplan, which is in response to your comments in your letter, *Review of Remedial Investigation Report*, *Kwik Trip # 765* dated November 30, 2001. The purpose of this workplan is to provide the additional information your requested and to formulate the proposed scope of work for the final phase of the remedial investigation.

#### Additional Information:

The soil excavation activities were associated with the installation of the new UST system and removal of the previous UST system. Sample locations and analytical results were provided in the original *Work Plan* dated July 1998. The soil samples were collected, screened with a photoionization detector (PID), and submitted for analytical analysis. The sampling program was based on UST closure sampling requirements. Extensive sidewall sampling was not conducted since a NR 716 remedial investigation was to be conducted. Attached in Appendix A is the PID screening results, analytical summary sheet and the associated figures.

#### Scope Of Work:

The following activities will be associated with the additional RI workplan:

- A limited Phase I will be performed to attempt to address the concerns regarding the potential source of the chlorinated compounds within MW-7.
- An additional piezometer will be nested with the existing nested wells, MW-5 and PZ-1 (Figure 2). The purpose of this additional piezometer is to vertically define the plumes extent. MW-5 is currently screened from 20-30 feet below grade (ft bg) and PZ-1 is screened from 42.5-45 ft bg. PZ-1 had benzene concentrations 2 orders of magnitude higher than MW-5. Both wells are set in the Galena/Platteville Formation (limestone/dolomite), which extends locally to a depth of at least 160 feet. Based on

the fractured characteristics of this bedrock formation and the high concentrations in PZ-1, LBG recommends that PZ-3 be installed at least 50 feet below PZ-1. The well would be constructed with the installation of a temporary outer casing being set at approximently 50-60 ft bg and then upon the coring/drilling reaching the depth of 95 ft bg, a permanent casing attached to a 2.5ft length of screen would be placed within the temporary casing. An appropriate well screen sand pack would then be placed around and above the screen, and a bentonite seal placed above the sand pack and the permanent casing would then be grouted in using bentonite chips to the surface. The temporary casing will be removed during the grouting of the permeant casing. Based on conversations with environmental drillers, this will insure a better seal with the casing and the rock interface, than would typically be found with a well installed with a double cased method. The well would also be logged to better define the on-site geology, and adjustments made if field results determine a better placement of the well.

- An additional monitoring well (MW-10) will be installed to the North of the site to better address upgradient conditions. This well will likely be placed on the North side of Division street.
- Following installation, the wells will be developed in accordance with NR 141.
- Two complete sampling rounds will be performed.
- Samples from the monitoring well network will be analyzed for petroleum Volatile organic compounds (PVOC), gasoline range organics (GRO), diesel range organics (DRO) and polycyclic aromatic hydrocarbons (PAH). However, the initial round of sampling for the proposed monitoring well and piezometer will substitute volatile organic compound (VOC) analysis for the PVOC analysis. In addition, MW-6 and MW-7 will also be analyzed for VOCs instead of PVOCs.
- Survey of the elevations and locations of the new monitoring wells with respect to existing monitoring wells. Elevations will be referenced to mean sea level.
- Following the completion of all field work, an addendum to the RI report will be prepared in accordance with NR 716.

Please review this document and we can discuss any modifications you deem necessary. Otherwise, we will be forwarding you a copy of a *Cost Cap Exceedance Request* that will be submitted to the Wisconsin Department of Commerce.

Very truly yours,

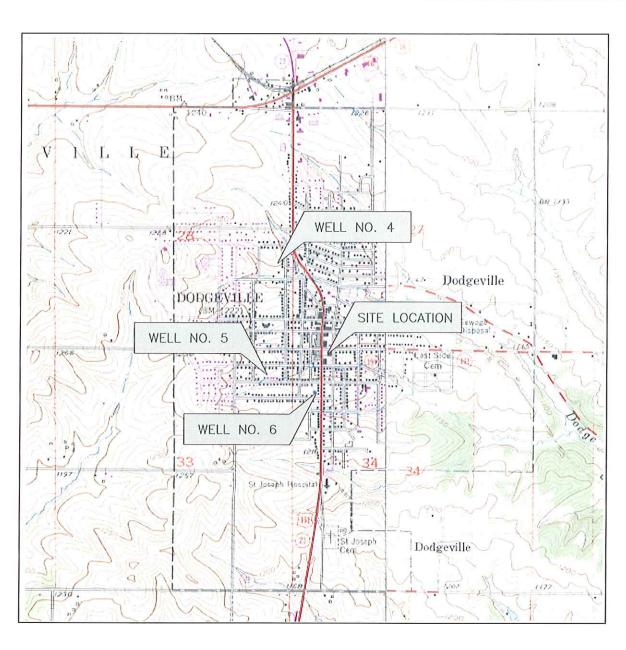
LEGGETTE, BRASHEARS & GRAHAM, INC.

Joseph A. Drapeau Senior Hydrogeologist, P.G.

JAD/jd

attachments:

cc: Mr. Scott Hafner, Kwik Trip





U.S.G.S. TOPOGRAPHIC DODGEVILLE, WIS JONESDALE, WIS 7.5 MINUTE QUADRANGLE





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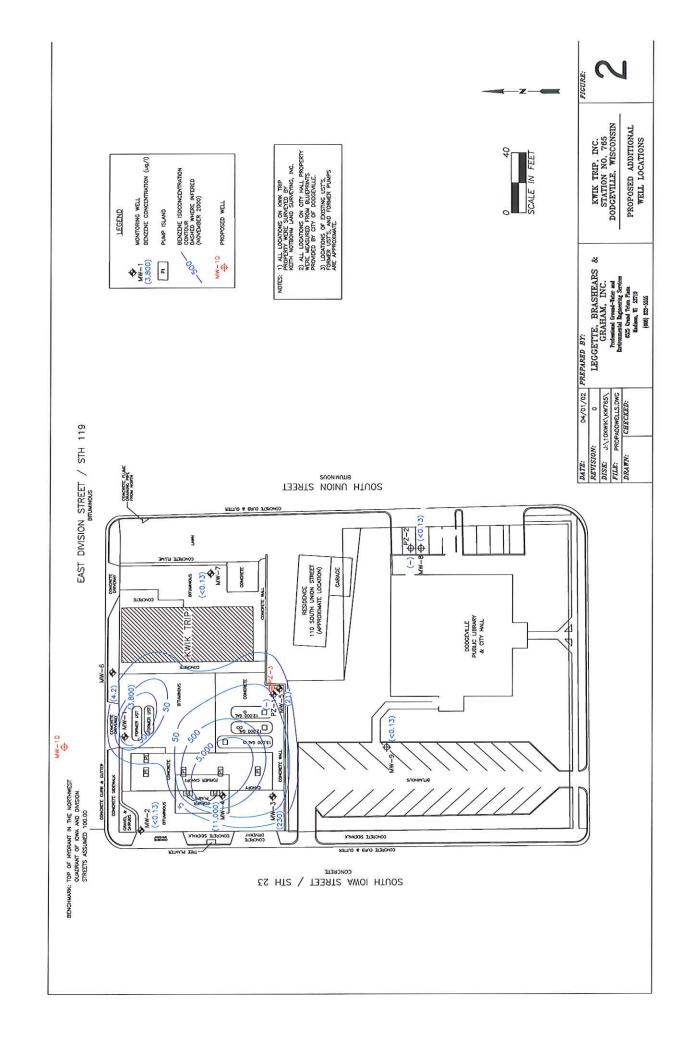
LEGGETTE, BRASHEARS & GRAHAM, INC.
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KWIK TRIP, INC. STATION NO. 765 DODGEVILLE, WISCONSIN

AREA LOCATION

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#### TABLE 1

#### KWIK TRIP, INC. STATION NO. 765 DODGEVILLE, WISCONSIN

#### UST REMOVAL FIELD SCREENING SUMMARY

Sample Number	Date	Sample Location	Approximate Depth (feet)	PID Reading (ppm)							
New UST E	New UST Basin Samples										
S-1	4/20/98	North Side	10	0.1							
S-2	4/20/98	Northeast Side	10	0.1							
S-3	4/20/98	Center	6	0.3							
S-4	4/20/98	Center	10	0.1							
S-5	4/20/98	Center	11	0.5							
S-6	4/20/98	South Side	10	0.1							
S-7	4/20/98	West Wall	4	0.1							
S-8	4/20/98	North Wall	12	0.1							
S-9	4/20/98	West Wall	12	0.1							
S-10	4/20/98	West Wall	12	0.6							
Gasoline U	Gasoline UST Removal Samples										
1	4/27/98	West End Tank 1	4	0.0							
2	4/27/98	Center Tank 1	3	0.0							
3	4/27/98	East End Tank 1	5	2.0							
4	4/27/98	Between Tanks East Side	8	57							
5	4/27/98	Between Tanks Center	8	3.3							
6	4/27/98	Between Tanks West Side	10	0.0							
7	4/27/98	West End Tank 1	6	5.7							
8	4/27/98	West End Tank 1	5	6.9							
9	4/27/98	East End Tank 2	3	250							
10	4/27/98	Center Tank 2	2	5.0							
11	4/27/98	West End Tank 2	2	12.0							
11b	4/27/98	West End Tank 2	11	0.0							
12	4/27/98	West End Tank 2	5	96							
13	4/27/98	Tank Fill Tank 2	11	357							
Pump Islan	Pump Island Samples										
A	4/27/98	South Pump Island	2	610							
В	4/27/98	South Pump Island	3	OR*							
С	4/27/98	South Pump Island	4	325							
D	4/27/98	North Pump Island	6	60							
Е	4/27/98	North Pump Island	3	815							
F	4/27/98	North Pump Island	6	130							

: Photoionization detector PID : Parts per million (as isobutylene)

ppm OR\*

 Over the range of the instrument (> 2,000 ppm)
 On 4/20/98 the PID registered a background reading of 0.6 ppm during field screening. Note

## STATION NO. 765 DODGEVILLE, WISCONSIN KWIK TRIP, INC.

# SOIL QUALITY SUMMARY UST REMOVAL

(results are in milligrams per kilogram (mg/kg))

	T	1											Т
Lead	50		300	909	1,450		187	202	6.5	8.8		ī	1.1
DRO	100		F	E			ı		į	Ļ		45	1.1
GRO	100		< 5.8	< 6.4	< 6.3		6.5	< 5.6	< 5.3	74		9	30 210
tert- Butylmethyl ether	-		< 0.029	< 0.032	< 0.031		< 0.029	< 0.028	< 0.027	< 0.052		:1	< 0.031 < 0.290
1,3,5- Trimethyl- benzene	r		< 0.029	< 0.032	< 0.031		< 0.029	0.031	< 0.027	1.90		ñ	0.298 5.13
1,2,4- Trimethyl- benzene	1		0.074	< 0.032	< 0.031		90.0	0.03	< 0.027	4.11		1	0.980
Total Xylenes	4.1		< 0.087	< 0.097	< 0.094		< 0.088	0.112	< 0.080	0.981		1	3.50
Ethyl- benzene	2.9		< 0.029	< 0.032	< 0.031		< 0.029	< 0.028	< 0.027	< 0.052		ï	0.149
Toluene	1.5		< 0.029	< 0.032	< 0.031		0.033	0.061	< 0.027	< 0.052			<b>0.236</b> < 0.290
Benzene	0.0055		< 0.029	< 0.032	< 0.031		< 0.029	0.071	< 0.027	< 0.052		1	< 0.031 < 0.290
Date Sampled	el		4/20/98	4/20/98	4/20/98	ımples	4/27/98	4/27/98	4/27/98	4/27/98	ımple	4/27/98	4/28/98
Sample Depth (feet)	ninant Lev	n Samples	10	10	12	Removal Sa	Ξ	11	Π	=	Removal Sa	6	amples 6 6
Sample ID	Residual Contaminant Level	New UST Basin Samples	S-2	S-6	S-8	Gasoline UST Removal Samples	Tank 1 West End	Tank 1 East End	Tank 2 West End	Tank 2 East End	Used Oil UST Removal Sample	TP-1	Pump Island Samples TP-2 6 TP-3 6

: Gasoline range organics GRO

Diesel range organics

Sample not analyzed for this parameter, or no Residual Contaminant Level listed for this compound in NR720, Wisconsin Administrative Code

Less than the laboratory method detection limit

Concentration exceeds the Residual Contaminant Levels established in NR720, Wisconsin Administrative Code

Sample numbers correspond to the following sample locations:

S-2: Northeast side of new tank basin

S-6: South side of new tank basin

S-8: North wall of new tank basin

TP-1: Between used oil tanks

TP-2: South pump island

TP-3: North pump island

Note

